See Complete Motorization Of City Ahead

Automotive Experts Predict Absolute Elimination of Horse-Drawn Commercial Vehicles Here in 10 Years

Notwithstanding that mechanical road transport in Great Britain antedates that in this country by fully a decade, there are more motor trucks in service in New York State alone than in all of the British Isles. Approximately one-eighth of all the trucks in use in the United States are operated by owners who live in this state, and almost three-fourths of the trucks operated in New York State are in service in Gotham.

The foregoing statistics are the result of compilations by the Motor Truck Association of America and show that New York City is the most highly truck-motorized city in the world. They are of more than usual interest when considered in connection with the city's industrial growth and its towering position among the leading port cities of the world. Since 1917 31,878 trucks have come into use here, or 75 per cent of the total number now operating within the city limits, which fact cannot but be regarded as significant of the rapid trend toward complete motorization in this country.

Figures obtained from the local branch of the office of the Secretary of State reveal that in 1918 there were only 42,122 trucks registered in this city, while in 1919 the number had grown to 53,821 and in the present year to 74,000. In the state there are now registered more than 110,000 motor trucks, an increase of nearly 13,000 over last year and an increase of about 18,000 since 1918. In 1912 there were registered in the state only 7,606 trucks.

Gain Is Amazing

The gain has, therefore, amounted to nearly 1,500 per cent in the last nine years, a fact which seems to be little short of amazing.

Automotive experts foresee a 100 per cent motorized Gotham within the next ten years, with a corresponding elimination of all horse-drawn vehicles from the congested thoroughfares of the greater city and a consequent speeding up of transportation, which is declared essential to the continued industrial progress of the city.

With all the sentiment that attaches to the horse, his day is short as a vital force in local transportation, and the figures just cited are regarded as the best evidence of this evolution. It has been demonstrated that motor transportation is cheaper, faster, more practicable and less hazardous to traffic generally.

Best Market for Trucks

Considered from the truck manufacturers' and dealers' viewpoint, New York City, by reason of its size and necessity for more efficient means of transport from year to year, is the best motor truck market in the world. Those trucks now in use are not confined to any one industry, but are employed in every kind of wholesale and retail business from the haulage contractor who moves 7½-ton loads down to the retailer who delivers packages weighing less than 1,000 pounds.

If the ratio of increase in truck use from 1912 to 1920 continues to hold it is estimated there will be a market for 66,394 trucks in the next nine years, exclusive of replacements required by the wearing out of trucks now in use. But the market and the transportation industry of New York, big as it is, is only one part of the great metropolitan market which spreads out into Connecticut and New Jersey and even into Pennsylvania, Massachusetts and Rhode Island. In these six states there were in use at the end of 1919 a total of 240,059 trucks, or more than 25 per cent of all those registered throughout the United States. Five years ago only 53,710 trucks were registered in the same six states, or approximately 190,000 less than in 1919.

Highway Show Will Be National in Scope

The Motor Truck Association's Highway Transportation Show, to be held January 3 to 8 at the 12th Regiment and 1st Field Artillery armories, will have so many educational features that manufacturers, dealers and owners may well regard it as an idea exposition. Attendance, which, according to members of the show committee, will by no means be limited to highway transport fans from New York, New Jersey, Pennsylvania, Massachusetts and Rhode Island, but from nearly every state in the Union, will be national in its character and any benefits to be had from the exhibits and program arranged may therefore be regarded as of national importance. It is the only show of its kind of anywhere near national proportions thus far announced for 1921.

An educational feature that bids fair to be as interesting as it is instructive will be a series of motion picture productions depicting the mechanical possibilites of standardized machines, the effect of certain kinds of transportation upon the highways and a photographic analysis of roadbeds, widths, surfaces, subsoil investigations and causes of road wear upon which legislatures will be asked to base their charges for truck registration fees.

The following rules for the chauffeurs' essay contest to be held throughout the show have been announced:

Each chauffeur competing will register name, address, registration number and name of employer.

The essay must name the ten best points of quality in any motor truck on exhibit and enumerate why these points of quality are best. Each essay to be limited to 250 words.

The essays to be judged by five authorities on the motor truck and $500 cash prizes to be awarded Saturday evening, January 8.

Automobile Engineers to Hear Motor Boat Talks

Captain William W. Nutting will tell of his thrilling battle with an Atlantic typhoon at the motor boat dinner of the Society of Automotive Engineers Tuesday evening at the Automobile Club of America. Other speakers will be William B. Rogers jr., of Motorboat, who will give a short talk on the standardized boat; Garwood and Chris Smith, of Miss America fame; Lieutenant Commander Holbrook Gibson, of the navy, who has some new test data on captured German submarine engines to disclose; William Deed, prominent motorboat designer, and G. C. Davison, of the New London Ship and Engine Company, who will give some interesting cost and operation data.

The dinner is scheduled for 6 o'clock.

How to Overcome Difficulties of Winter Motoring

Technical Expert Supplies Timely Advice Regarding Vaporization, Care of the Batteries and Lubrication

Making the auto "aut" when it ought to, regardless of the weather, is a problem which H. Clifford Brokaw, technical director of the West Side Y. M. C. A. Automobile School, treats in interesting fashion in the following article on cold weather driving. His advice is in itself a timely solution of the recurrent hazards of winter motoring.

Once upon a time, as fairy tales begin, it was customary to stow the old boat in the barn when the first snowflakes appeared and not get it out until the robins were chirping merrily in the trees. This may hold true in some of the back country districts yet, but for city driving there seems to be little difference between summer and winter.

Of course, there is less purely pleasure driving, but the automobile has come to be such a part of the daily life that the average owner would not think he could possibly get along without it. Even last winter, when the continued storms and low temperature made the streets nightmares, flivver and limousine plowed through drifts and over the ice mounds and got there, when streetcar systems failed and traffic generally was in a considerable tangle.

In these days when streets are supposed to be cleaned promptly after a snowfall and when suburban main thoroughfares are in fair condition twenty-four hours after a storm there is no reason why winter driving should not be the rule rather than the exception. One must adapt one's self to the different conditions and learn how to make the auto "aut" when it ought to.

The first difficulty encountered in winter driving is starting the motor. Low grades of gasoline do not vaporize readily at low temperatures. They may spray through the needle valve, but when they hit the cold walls of the mixing chamber, manifold and the cylinder there is a quick condensation, and liquid gasoline is about as noninflammable as water. The problem, therefore, is one of vaporization. This may be accomplished in a number of ways. There are a number of devices sold for warming the carburetor and intake manifold or keeping them warm. These devices are not too expensive for the average purse.

Hot Water May Be Used

When the carburetor is waterjacketed it is also possible to drain the cooling system and fill it up with hot water before starting the engine, and as a last resort one may wrap a cloth around the intake manifold, pour over it hot water from the madam's tea kettle, observing due care not to mix any of it with the gasoline in the carburetor.

Any of these means will raise the temperature enough to allow vaporization so that the engine will start. Of course, when it is running it produces heat enough to cause proper vaporization.

A previous article has dealt with the cold weather troubles of the cooling system and the necessity for an anti-freeze solution and for covering the radiator. With some motors it is found advisable also to remove the fan belt, but ordinarily it is much better to let the fan run and cover as much of the radiator as is necessary to give proper temperature to the engine.

The next problem which the winter driver must consider is the electric system. Presumably the car has an electric starter. This means that the battery which supplies current to turn over the starting motor must have a great deal more care than in the summer time. This is necessary for several reasons: First, the battery does not work so well in cold weather. The battery does not really store electricity, it produces it by chemical action and chemical action is always slower at low temperature. Therefore the battery must be favored.

Batteries Put to Test

Nevertheless greater calls are made upon the battery in winter than in summer. It takes a little longer for the starter to get the engine going and every second makes a terrific drain upon the battery. Lights are burned much longer because of the short days and also there are fewer long drives to give the generator a chance to charge the battery, so that it is in danger of being starved and then suddenly of refusing to function. The solution is to leave the battery at a service station once a month or so and have it fully charged. If this is not done there is likely to be faulty ignition, trouble with the lights and failure to turn over the engine properly in starting. Some generators are equipped with a radiator, the proper adjustment of which will increase the amount of current sent into the battery.

The next most important problem of the winter driver is the matter of tires. In the average winter in the city the pavements are about as easy on tires as in the summer, but last winter there was an undue amount of ice on the streets, which produced a great deal of slipping and slewing, with wear on the tires, and there were jagged chunks of ice and ruts which ground down the tires at a rapid rate or cut them to shreds.

This is also true on dirt roads in the country where frozen ruts are constantly fighting the tires, and somehow or other the tires always get licked in that kind of a contest. Sometimes there are ruts which do not cut the tires; they are deep enough so that the side walls of the tire rub against the sides of the rut and wear away the rubber, weakening the walls and causing them to break down and blow out.

Chains Wear the Tires

Of course, no one would think of driving in winter without skid chains, even though the car were equipped with the most efficient non-skid tires. Skid chains are very necessary but they do wear the tires. Some day possibly some one will invent a device to prevent skidding which will slip on over the tire, taking all the wear and keeping the tires themselves free from wear. But nobody yet has thought this out, and until it is done the driver must save his tires by driving carefully, slowly, and turning corners at reduced speed and keeping off rough and icy roadways as much as possible.

Lubrication of the car is another important thing in winter driving. It is doubly important to screw down all grease cups and squirt oil into every oil hole and every working joint, and it is necessary to see that the proper kind of oil or grease is used in the gear shift case and the differential case. If too heavy oil or grease is used it makes an unnecessary drag on the engine, using up several horsepower because of the braking effect. Because the grease is stiff it is a good idea to kick out the clutch when you press the self-swarter pedal to relieve the motor of its load.

The lubrication of the clutch and keeping it clean is another important thing in winter, especially if it be a disk clutch, for the clutch which does not work freely is a nuisance.

A light winter oil should be used in the crank case in cold weather, its character being determined by the manufacturer's instruction book, but it must be changed much more frequently in winter because of the extra condensation of water and gas which will thin the oil, so that it neither lubricates nor seals the pistons. Oil which does not circulate freely or have the proper lubricating qualities will result in burned-out bearings and motor inefficiency. Bearings may be burned out by friction before the engine becomes warm enough to cause the oil to circulate freely.

Roads to Quaker City Undergoing Big Improvement

Few Detours Now Necessary and Opening of the 1921 Touring Season Will See Many Miles New Concrete

By the opening of the 1921 touring season there will be new concrete the greater part of the way from New York to Philadelphia. The roads on this important trunk line continue to improve, and one of the field men of the American Automobile Association has just completed a thorough inspection of the route.

There are no detours through to New Brunswick, all repair work having been completed. The only inconvenience over that stretch arises from the congestion of commercial traffic at the West Forty-second Street ferry and going through Newark. All holes in the surface between Metuchen and New Brunswick have been filled.

The detours remain on the New Brunswick-Trenton section of the Lincoln Highway. One acquainted with these detours and favored with dry weather may be justified in taking that route, and thus have the advantage of the long stretch of faultless new concrete the balance of the way through Franklin Park to Kingston. But the stranger and any one making the trip in wet weather should keep to the left out of New Brunswick, and go through Dayton, Cranbury and Edinburg to Trenton.

Repair work on the Pennsylvania side of the Delaware River has also been completed, and there are no detours from Trenton to Philadelphia, though the section from Oxford Valley and Langhorne to Bustleton is far from ideal. Care should be used in crossing two or three narrow old bridges on this stretch. After leaving Bustleton the Roosevelt Boulevard, the new name for the former Northeast Boulevard, now extending almost to the lower edge of Bustleton, makes a good connection into the Quaker City.

"This trip, which during the height of the touring season often took the greater part of the day to make without injury to one's car, can be made comfortably now in five hours at the most. Strip maps and complete information are obtainable at the A. A. A. headquarters touring bureau, 501 Fifth Avenue.

Motorists Hail Proposed Stapleton Ferry Service

Motorists of this city, particularly those of Staten Island, look with considerable favor upon the recommendation of Grover Whalen, Commissioner of Plant and Structures, for restoration of the old Staten Island ferry service between Stapleton and Manhattan, which was abandoned in 1915. Because of the congestion on the St. George ferry, which is constantly growing worse, the need for the additional service is felt keenly, and the trucking industry regards the proposed restoration as essential to the city's business.

Mr. Whalen has asked the Board of Estimate to authorize a bond issue to defray the cost of building three ferry boats, each of which will carry fifty vehicles and provide room for passengers on the upper deck, and for the building of a terminal at Stapleton. The Manhattan terminus will be located at or near Cortlandt Street, to relieve much of the traffic congestion existing below Fulton Street.